

Application No.: 10/083,003

REMARKS

Claims 1-11 are pending in this application. Claims 1, 2, 6, 7 and 9 have been amended.

Claims 1-11 were rejected under 35 USC §103(a) as being unpatentable over Eckstrom (WO 09/18306) in view of Barnard et al. (U.S. Publication No. 2003/0005100).

Applicant's method and system solves the problem of identifying a device, such as a printer, on a remote subnet in a network by using a name associated with the device to be identified. For example, if a user wants to find a device known by the name "Phaser 6200", and there is at least one printer in the network associated with that name, the method and system will find the desired printer. Applicant's method as claimed in Claim 1, as amended, claims method of locating devices on a network, comprising: identifying a group name associated with a device to be discovered on the network, wherein the group name may be associated with multiple devices having multiple addresses on the network; creating a list of known subnets and known devices on the network; querying a name server for a list of IP addresses associated with the group name and obtaining a list of returned addresses associated with devices associated with the group name; contacting each returned address associated with the group name for the returned device's IP subnet information; determining which of the returned devices is the discovered device; determining the discovered device's subnet; and adding the discovered device and its subnet to the list of known subnets and known devices on the network.

Claim 6, as amended, claims a system for network device location, comprising: an address server for associating IP addresses of devices on the network with a group name, wherein the group name which may be associated with multiple devices having multiple addresses on the network; a discoverable device located on a first subnet of the network, wherein the discoverable device has an IP address, and wherein the discoverable device's IP address is associated with the group name; and a discovering device, located on a second subnet of the network, for creating a list of known subnets and known devices on the network; for querying the name server for a list of IP addresses associated with the group name and obtaining a list of returned addresses associated with devices associated with the group name; for contacting each returned address of each discoverable device associated with the group name for each discoverable device's IP

Application No.: 10/083,003

subnet information; for determining which of the returned devices is the discoverable device; for determining the discoverable device's subnet; and for adding the discoverable device and its subnet to the list.

1. Nothing in Eckstrom or Barnard teaches use of a device's group name to obtain the device's location on the network. Both Eckstrom and Barnard collect a device's information after the device has been discovered.

Eckstrom discloses a traditional method of discovering devices on a network. In Eskstrom, "all the devices are discovered by querying (i.e., "pinging") device addresses within a range of addresses that correspond to the at least subset of a computer network and monitoring for responses. Each responding device is categorized as one of a configured device type (such as switch type or a host type) and an unknown device type. Information about the device is stored in a subnet device list . . ." See page 5, lines 7-11. In Eckstrom, for "each device in the subnet device list, a port object is created for each port of the device, along with addresses and masks associated with that port." See page 5, lines 16-17. Eckstrom does not add "name of device" until after the device has been discovered and a device object created for each of its ports. "Figs. 5a, 5b, and 5c, device objects 150, 152, and 154 that are produced by the method 102 of the present invention are respectively illustrated." See page 11, lines 6-7. Figs. 5a, 5b, and 5c of Figs. 5a, 5b, and 5c show "Name of Device".

Barnard discloses a network management tool, which automatically detects the presence of each network device on the network. Upon detection of a network device, discovery is conducted to obtain configuration information and capabilities information regarding the detected network device. See paragraph [0009]. Instead of using a querying method to detect devices, as taught by Eckstrom, the network management tool of Barnard listens for messages from network devices and uses those to detect new devices on the network. Barnard uses the detected network address of the newly discovered device to query it for information about it. Barnard stores the information received from the discovered device, including domain name, in a Device Management Directory 70 as shown in Fig. 7 of Barnard and as described in paragraph [0056] is believed to be the only reference in Barnard to a "domain name".

Application No.: 10/083,003

In contrast, Applicant's method, in part, queries a name server for a list of IP addresses associated with the group name of the device to be discovered, obtains a list of returned addresses associated with devices associated with the group name; contacts each returned address associated with the group name for the returned device's IP subnet information; determines which of the returned devices is the device to be discovered and then determines the discovered device's subnet on the network.

2. Barnard teaches classic discovery, including DNS lookup. DNS lookup is not the same as Applicant's method as claimed in Claim 1.

In lieu of the detection step prior to discover, in Paragraph [0059] Barnard describes use of classic discovery techniques to discover devices on the network. As noted in Barnard, "discovery module 84 can obtain a list of assigned IP addresses from a DNS server on the network and then send an SNMP discovery request to each printing device having an IP address on the list." Such classic discovery techniques may or may not find the name server in which the device to be discovered is located. Further, Barnard does not teach or suggest "identifying a group name associated with a device to be discovered on the network, wherein the group name may be associated with multiple devices having multiple addresses on the network; creating a list of known subnets and known devices on the network; querying a name server for a list of IP addresses associated with the group name on at least one of the known subnets and obtaining a list of returned addresses associated with devices associated with the group name; contacting each returned address associated with the group name for the returned device's IP subnet information; determining which of the returned devices is the discovered device; determining the discovered device's subnet; and adding the discovered device and its subnet to the list of known subnets and known devices on the network."

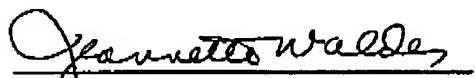
No additional fee is believed to be required for this amendment; however, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025.

Reconsideration of this application and allowance thereof are earnestly solicited. Claims 1-11 are believed to be in condition for allowance. In the event the Examiner considers a

Application No.: 10/083,003

personal contact advantageous to the disposition of this case, the Examiner is requested to call the undersigned Attorney for Applicant, Jeannette Walder.

Respectfully submitted,


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Xerox Corporation
Santa Ana, California
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